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RAW SEQUENCE LISTING

DATE: 04/03/2003

PATENT APPLICATION: US/10/038,895A

TIME: 12:06:46

Input Set : E:\3379.1.ST25.txt

Output Set: N:\CRF4\04032003\J038895A.raw

3 <110> APPLICANT: Kulp, David C.
 4 Siani-Pose, Michael A.
 5 Williams, Alan J.
 6 Haimon, Cyrus L.
 7 <120> TITLE OF INVENTION: Nucleic Acids Encoding G Proteins Coupled Receptors
 10 <130> FILE REFERENCE: 379.1
 11 <140> CURRENT APPLICATION NUMBER: 10/038,895A
C--> 13 <141> CURRENT FILING DATE: 2003-03-25
 14 <150> PRIOR APPLICATION NUMBER: US 60/244,082
 16 <160> PRIOR FILING DATE: 2000-10-26
 17 <161> NUMBER OF SEQ ID NOS: 20
 20 <170> SOFTWARE: PatentIn version 3.2
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 274
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Artificial Sequence
 25 <214> FEATURE:
 26 <215> OTHER INFORMATION: Synthetic Organism
 27 <216> FEATURE:
 28 <217> NAME/KEY: misc_feature
 29 <218> LOCATION: (135)..(136)
 30 <219> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
 31 <214> FEATURE:
 32 <215> NAME/KEY: misc_feature
 33 <218> LOCATION: (146)..(146)
 34 <219> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
 35 <400> SEQUENCE: 1
 40 Leu Leu Ala Pro Thr Gly Ser Leu Phe Arg Asn Cys Thr Gln Asp Gly
 41 1 5 10 15
 42 Trp Ser Glu Thr Phe Pro Arg Pro Asn Leu Ala Cys Gly Val Asn Val
 43 20 25 30
 44 Asn Asp Ser Ser Asn Glu Lys Arg Ser Tyr Leu Leu Lys Leu Lys Val
 45 35 40 45
 46 Met Tyr Thr Val Gly Tyr Ser Ser Ser Leu Val Met Leu Leu Val Ala
 47 50 55 60
 48 Leu Gly Ile Leu Cys Ala Phe Arg Arg Leu His Cys Thr Arg Asn Tyr
 49 65 70 75 8
 50 Ile His Met His Leu Phe Val Ser Phe Ile Leu Arg Ala Leu Ser Asn
 51 85 90 95
 52 Phe Ile Lys Asp Ala Val Leu Phe Ser Ser Asp Asp Val Thr Tyr Cys
 53 100 105 110
Wtc-> 71 Asp Ala His Arg Gly Cys Lys Leu Val Met Val Leu Phe Xaa Tyr Cys
 72 115 120 125

ENTERED

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75 Ile Met Ala Asn Tyr Ser Trp Leu Leu Val Glu Gly Ser Thr Phe Thr
76      140      135      140
77 His Lys Leu Ala Ile Ser Phe Phe Ser Glu Arg Lys Tyr Leu Gln Gly
78      145      150      155      160
79 Phe Val Ala Phe Gly Trp Gly Ser Pro Ala Ile Phe Val Ala Leu Trp
80      165      170      175
81 Ala Ile Ala Arg His Phe Leu Glu Asp Val Gly Cys Trp Asp Ile Asn
82      180      185      190
83 Ala Asn Ala Ser Ile Trp Trp Ile Ile Arg Gly Pro Val Ile Leu Ser
84      195      200      205
85 Ile Leu Asn Phe Ile Leu Phe Ile Asn Ile Leu Arg Ile Leu Met Arg
86      210      215      220
87 Lys Leu Arg Thr Gln Glu Thr Arg Gly Asn Glu Val Ser His Tyr Lys
88      225      230      235      240
89 Arg Leu Ala Arg Ser Thr Leu Leu Leu Ile Pro Leu Phe Gly Ile His
90      245      250      255
91 Tyr Ile Val Phe Ala Phe Ser Pro Glu Asp Ala Met Glu Ile Gln Leu
92      260      265      270
93 Phe Phe

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115 (11) SEQ ID NO: 1

116 (11) LENGTH: 381

117 (11) TYPE: DNA

118 (11) ORGANISM: Artificial Sequence

119 (11) FEATURE:

121 (11) OTHER INFORMATION: Synthetic Organism

123 (11) SEQUENCE: 1

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124 ctcttggaac tgaaggttc ctgtttcaga aactgcacac aggatggctg gtcagaaacc      60
125 ttccctgggc ctacttggc ctgtggcggt aatgtgaacg actcttcacaa cgagaagcgg      120
126 cctctctacc tctggaagct gaaagtcatg tacaccgctg gctacagctc ctccctggtc      180
127 aggtctctcg tgcctctggg cctctctctg gcttttcgga ggtctcaactg caactgcacac      240
128 taccatccac tgaactgtt cgtgtccttc atccttctgt cctgttcacaa ctctcatcaag      300
129 gaggcctgac tctctctctc agatgatgtc acctactggg atgcccacag ggcgggctgc      360
130 acptctgtca tgggtcgtt c

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139 (11) SEQ ID NO: 2

140 (11) LENGTH: 447

141 (11) TYPE: DNA

142 (11) ORGANISM: Artificial Sequence

143 (11) FEATURE:

145 (11) OTHER INFORMATION: Synthetic Organism

146 (11) FEATURE:

148 (11) NAME/KEY: misc_feature

150 (11) LOCATION: (58)..(58)

151 (11) OTHER INFORMATION: n is a, c, g, or t

152 (11) SEQUENCE: 2

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W--> 154 tactgcatca tggccaacta ctctggctg ctgggtggaag gctctacott cacacatntc      60
155 ctcgcatctt cctctctctc tgaagaaaag tacctccagg gatttctggc attcggatgg      120
156 gttctccag ccatctttgt tctttctggg gctattgcca gacactttct ggaagatgtt      180
157 ggtgtctggg acatcaatgc caacgcctcc atctgggtga tcatctgtgg tctgtgctc      240
158 ctctccatcc tgattaattt cctctcttct ataaacattc taagaatcct gatgagaaaa      300

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164 cttagaacccc aagaaacaag aggaatatgaa gtcagccatt ataagcgccct ggcacaggtaa 360
165 actcctctgc tgaacccctt ctctggcacc cactacatcg tcttgcctt ctcccagag 410
166 gacqctatgg agatccagct gttttt 447
167 <21> SEQ ID NO: 4
168 <21> LENGTH: 828
169 <21> TYPE: DNA
170 <21> ORGANISM: Artificial Sequence
171 <21> FEATURE:
172 <21> OTHER INFORMATION: Synthetic Organism
173 <21> FEATURE:
174 <21> NAME/KEY: misc_feature
175 <21> LOCATION: (439)..(439)
176 <21> OTHER INFORMATION: n is a, c, g, or t
177 <400> SEQUENCE: 4
178 ctttgggac caccagttc ctgttccga aactgcacac aggatggctg gtcagaaacc 60
179 tttccagac ctatctggc ctgttgggtt aatgtgaacg actcttccaa agagaagcgg 110
180 cactctacc tcttgagct gaaagtcacg taacacgttg gctacagctc ctccctggtc 160
181 atctctctg tctccctgg cactctctgt gcttccggga ggtcccactg cactcgaac 210
182 ttttccaca tgaacctgt cgtgtccctt atctctctg cctgttccaa ctccatcaag 260
183 gacccctgc tctctctc agatgatgc aactactgg atgcccacag ggggggtgc 310
184 aatgtgaca tctgtctgt ctactgcac atggccaaact actcctggt gotggtgaa 360
W--> 200 ggctctacct tcacacatnt cctcgcacac tcctttctct ctgaaagaaa gtacctccag 480
201 ttttctgt ccttctctg ggttctccaa gcatctttg ctgcttctgt ggtattgac 540
202 agacatttc tgaagatgt tgggtgctgg gatccaatg ccaacgcac cactctgttg 600
203 atctctgtg ctctctgat cctctccac ctgatttaatt ccatccttt cctaacatt 660
204 ctacaaatc tcttgajaa acttagaac caagaaacaa gaggaaatga agtcagcat 710
205 taaagagcc tgcacaggtc cactctctg ctgacccccc tctttggcat ccactacac 780
206 gtttgcct tctcccaga ggaagctatg gagatccagc tgtttttt 840
207 <21> SEQ ID NO: 5
208 <21> LENGTH: 320
209 <21> TYPE: PRT
210 <21> ORGANISM: Artificial Sequence
211 <21> FEATURE:
212 <21> OTHER INFORMATION: Synthetic Organism
213 <400> SEQUENCE: 5
214 Pro Thr Phe Ile Leu Phe Ser Phe Gln Pro Gly Asp Lys Arg Thr Lys
215 1 5 10 15
216 His Ile Cys Val Tyr Trp Glu Gly Ser Glu Gly Gly His Trp Ser Thr
217 20 25 30
218 Gln Gly Cys Ser His Val His Ser Asn Gly Ser Tyr Thr Lys Cys Lys
219 35 40 45
220 Cys Phe His Leu Ser Ser Phe Ala Val Leu Val Ala Leu Ala Pro Lys
221 50 55 60
222 Asp Pro Val Leu Thr Val Ile Thr Gln Val Gly Leu Thr Ile Ser Leu
223 65 70 75 80
224 Leu Cys Leu Phe Leu Ala Ile Leu Thr Phe Leu Leu Cys Arg Pro Ile
225 85 90 95
226 Gln Asn Thr Ser Thr Ser Leu His Leu Glu Leu Ser Leu Cys Leu Phe
227 100 105 110

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253 Leu Ala His Leu Leu Phe Leu Thr Gly Ile Asn Arg Thr Glu Pro Glu
254          115          120          125
257 Leu Cys Ser Ile Ile Ala Gly Leu Leu His Phe Leu Tyr Leu Ala Cys
258          130          135          140
261 Phe Thr Trp Met Leu Leu Gln Gly Leu His Leu Phe Leu Thr Val Arg
262 145          150          155          160
265 Asn Leu Lys Val Ala Asn Tyr Thr Ser Thr Gly Arg Phe Lys Lys Arg
266          165          170          175
269 Phe Met Tyr Pro Val Gly Tyr Gly Ile Pro Ala Val Ile Ile Ala Val
270          180          185          190
273 Ser Ala Ile Val Gly Pro Gln Asn Tyr Gly Thr Phe Thr His Cys Trp
274          195          200          205
277 Leu Lys Leu Asp Lys Gly Phe Ile Trp Ser Phe Met Gly Pro Val Ala
278          210          215          220
281 Val Ile Ile Leu Asn Leu Val Phe Tyr Phe Gln Val Leu Trp Ile Leu
282          225          230          235          240
285 Arg Ser Lys Leu Ser Ser Leu Asn Lys Glu Val Ser Thr Ile Gln Asp
286          245          250          255
289 Thr Arg Val Met Thr Phe Lys Ala Ile Ser Gln Leu Phe Ile Leu Gly
290          260          265          270
293 Cys Ser Trp Gly Leu Gly Phe Phe Met Val Glu Glu Val Gly Lys Thr
294          275          280          285
297 Ile Gly Ser Ile Ile Ala Tyr Ser Phe Thr Ile Ile Asn Thr Leu Gln
298          290          295          300
301 Gly Val Leu Leu Phe Val Val His Cys Leu Leu Asn Arg Gln Val Arg
302 305          310          315          320

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#110: SEQ ID NO: 6

#111: LENGTH: 969

#112: TYPE: DNA

#113: ORGANISM: Artificial Sequence

#114: FEATURE:

#115: OTHER INFORMATION: Synthetic Organism

#116: SEQUENCE: 6

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114 ccaactttcc tactattctc ttccagccct ggtagacaaga gaacaaacaa tatctgtgtc      60
116 tactgggagg gatcagaggg aggcacatgg tccacgggagg gctggtctca tgtgcacagc      120
118 agcgtttctt acaccaaattg caagtgtctc catctgtcca gctttgcagt cctcgttgcg      140
120 ctggccccc aaggaggacc tgtgtgacc gtagacccc aggtgggggt gaacatctct      160
122 cgtgtgtgac tttcctgggc catctccacc ttctctctgt gcgggcccac ccagaaaccc      180
124 aacacctccc tccatctaga gctctccctc tgcctcttcc tggcccaccc cctgttctcg      200
126 aacgggacaa acagaactga gccagaggtg ctgtgtccca tcattgacgg gctgctccac      220
128 ttcctctacc tggcttggtt cacttggtat cctctgggaag ggtctgaccc ctctctccac      240
130 gtccaggaac tcaaggtggc caactacacc agcacgggga gattcaagaa gaggttccatg      260
132 tcccctgtag gtaacgggat cccagctgtg attattgctg tgtcaggaat agttggaccc      280
134 cagaattatg caacatttac tcaatgttgg ctcaagcttg ataaaaggatt catctggagc      300
136 tccatggggc cagtaccagt catctctctg ataaaactgg tcttctactt ccaagttctg      320
138 tgatttttga gaagcaaac ttctctctc aataaagaag ttccacccat tcaggacacc      340
140 aaagtcatga catcaaaagc catctctcag ctatttacc tgggtgtgtc ttggggcctt      360
142 gtttttttta tgggtgaaga agtaggggaag acgattggat caatcattgc atactcattc      380
144 aacatcatca acacctttca gggagtgttg ctctttgttg tacactgtct ccttaacgcg      400

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Input Set : E:\3379.1.ST25.txt

Output Set: N:\CRF4\04032003\J038895A.raw

346 caggtaagg 969
 347 <210> SEQ ID NO: 7
 350 <211> LENGTH: 217
 351 <212> TYPE: PRO
 352 <213> ORGANISM: Artificial Sequence
 354 <220> FEATURE:
 355 <230> OTHER INFORMATION: Synthetic Organism
 357 <400> SEQUENCE: 7
 359 Gln His Ser Asp Ala Val His Asp Leu Leu Leu Asp Val Ile Thr Trp
 360 1 5 10 15
 363 Val Gly Ile Leu Leu Ser Leu Val Cys Leu Leu Ile Cys Ile Phe Thr
 364 20 25 30
 367 Phe Cys Phe Phe Arg Gly Leu Gln Ser Asp Arg Asn Thr Ile His Lys
 368 35 40 45
 371 Asn Leu Cys Ile Ser Leu Phe Val Ala Glu Leu Leu Phe Leu Ile Gly
 372 50 55 60
 375 Ile Asn Arg Thr Asp Gln Pro Ala Cys Ala Val Phe Ala Ala Leu Leu
 376 65 70 75 80
 379 His Phe Phe Phe Leu Ala Ala Phe Thr Trp Met Phe Leu Glu Gly Val
 380 85 90 95
 383 Gln Leu Tyr Ile Met Leu Val Gln Val Phe Glu Ser Glu His Ser Arg
 384 100 105 110
 387 Arg Lys Tyr Phe Tyr Leu Val Gly Tyr Gly Met Pro Ala Leu Ile Val
 388 115 120 125
 391 Ala Val Ser Ala Ala Val Asp Tyr Arg Ser Tyr Gly Thr Asp Lys Val
 392 130 135 140
 395 Cys Trp Leu Arg Leu Asp Thr Tyr Phe Ile Trp Ser Phe Ile Gly Pro
 396 145 150 155 160
 399 Ala Thr Leu Ile Ile Met Asn Val Ile Phe Leu Gly Ile Ala Leu Tyr
 400 165 170 175
 403 Lys Met Phe His His Thr Ala Ile Leu Lys Pro Glu Ser Gly Cys Leu
 404 180 185 190
 407 Asp Asn Ile Lys Leu Lys Ile Asn Ile Pro Ile Ile Lys Ser Ile Tyr
 408 195 200 205
 411 Ile Tyr Met Tyr Ile Cys Met Cys Val
 412 210 215

413 <210> SEQ ID NO: 8
 416 <211> LENGTH: 657
 417 <212> TYPE: DNA
 418 <213> ORGANISM: Artificial Sequence
 420 <220> FEATURE:
 421 <230> OTHER INFORMATION: Synthetic Organism
 423 <400> SEQUENCE: 8
 424 caggcacagtg atgcgggtcca tgaactcctt ctggatgtga tcaagtgagg tggaaatttg 60
 426 cgttcctttg ttgtctcct gatttgcac tccacatttt gctttttcag ggggctccag 120
 428 aatgacagta acaccatcca caagaacctc tgcacagtc tctttgtagc agagctgtct 180
 430 ttcttgattg ggtacaccc aactgaccaa ccaattgctt gtgtgtttt cgttgccttg 240
 432 ttaacattct tttcttggg tgccttcacc tggatgttcc tggagggggg gcagctttat 300
 434 acatgtgtgg tggaggtttt tgagagttaa cattcacgta ggaataactt ttatctggtc 360

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/038,895A

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 126,146
Seq#:3; N Pos. 58
Seq#:4; N Pos. 439
Seq#:19; Xaa Pos. 370

VERIFICATION SUMMARY

DATE: 04/03/2003

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Input Set : E:\3379.1.ST25.txt

Output Set: N:\CRF4\04032003\J038895A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:112
M:341 Repeated in SeqNo=1
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:420
L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:368